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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,398	08/31/2006	Giuseppe Lo Biundo	Q89568	8985

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

EXAMINER

WEINSTEIN, LEONARD J

ART UNIT	PAPER NUMBER
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3746

NOTIFICATION DATE	DELIVERY MODE
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ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

sughrue@sughrue.com
PPROCESSING@SUGHRUE.COM
USPTO@SUGHRUE.COM

Office Action Summary	Application No. 10/553,398	Applicant(s) LO BIUNDO ET AL.	
	Examiner LEONARD J. WEINSTEIN	Art Unit 3746	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6 and 8-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 24, 2010 has been entered.
2. The examiner acknowledges the amendments to claims 1 and 8 and notes the introduction of claims 10 and 11.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 1, and by dependency claims 3-6, and claims 8, 10, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Claims 1, 8, 10, and 11 recite the limitation "motion transmission shaft." There is insufficient antecedent basis for this limitation in the claim. As best understood by the examiner the limitation will be considered to be --- single motion transmission shaft --- for the office action on the merits that follows.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2, 4-6, 8 and 9-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Whitefield US 5,282,446.

Whitefield teaches all the limitations as claimed for an oil and vacuum pump group for an engine (not shown; col. 2 ll. 16-19) including: **[claim 1]** said single motion transmission shaft (15, 31) extending along a main axis X-X (longitudinal axis of the water pump 11, oil pump 12, and vane pump 40 in the embodiment of figure 2; “pump axis”), at least one oil pump 12 mounted on a single motion transmission shaft (15, 31) coaxially to said main axis X-X (pump axis), at least one vacuum pump 40 mounted on said single motion transmission shaft (31 of 15, 31) coaxially to said main axis X-X (pump axis), a gear (the gear formed by the inner surface of element 16 when provided with a splined coupling with the ends of elements 15 and 31, col. 2 ll. 63-68; this would provide an inner surface element 16 with gear like teeth that engaged with the teeth formed by the splines on the shafts 15 and 31; “16 inner spline”) on said single motion transmission shaft (15 of 15, 31) coaxially said main axis X-X (pump axis) and adapted to derive a rotary motion from a driving gear (outer surface of the element 15 when a splined coupling is provided, see col. 2 ll. 63-68; the gear is constructively formed by pulley 42, shaft 15, and the splined coupling end of

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shaft 15; "gear end of 15") of an engine and to transfer said rotary motion to said single motion transmission shaft (transmits to element 31 of the shaft defined by elements 15 and 31) to drive said at least one oil pump 12 and said at least one vacuum pump 11, wherein the oil and vacuum pump group (12 and 40) is structurally independent from and adapted to be associated with said engine (col. 2 ll. 16-19),

[claim 2]

wherein said at least one oil pump 12 and said at least one vacuum pump 40 are units which are structurally independent from each other (col. 3 ll. 54-60);

[claim 4]

wherein said at least one oil pump 12 is a single-stage or two-stage pump;

[claim 5]

comprising means (body of 12; col. 3 ll. 26-30; 50-62) for the attachment to an engine block (not shown);

[claim 6]

wherein said means (body of 12 and element 15; col. 3 ll. 26-30; 60-62) for the attachment to an engine block (not shown) comprises a plurality of brackets 50 intended to cooperate with respective brackets (brackets that receive element 50; col. 3 ll. 26-30) formed on said engine block (not shown);

[claim 7]

wherein said at least one oil pump 12 and said at least one vacuum pump 40 are mounted on a single motion transmission shaft (15, 31) coaxially to said main axis X-X (pump axis; see embodiment of figure 2);

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[claim 9]

and an engine (col. 2 ll. 16-20), comprising an oil 12 and vacuum 40 pumps group according to claim 1.

[claim 11]

wherein said gear (16 inner gear) is operatively placed between said at least one oil 12 and said at least one vacuum pump 40;

Whitefield teaches all the limitations as claimed for a method for assembling an oil and vacuum pump group for an engine (not shown; col. 2 ll. 16-19) including the steps of:

[claim 8]

- a. providing single motion transmission shaft (15, 31) extending along a main axis X-X (pump axis),
- b. providing at least one oil pump 12
- c. providing at least one vacuum pump 40
- d. providing a gear, (the gear formed by the inner surface of element 16 when provided with a splined coupling with the ends of elements 15 and 31, col. 2 ll. 63-68; this would provide an inner surface element 16 with gear like teeth that engaged with the teeth formed by the splines on the shafts 15 and 31; “16 inner gear”); so as to define a group which is structurally independent from and adapted to be associate with said engine (not shown).

[claim 10]

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The step of the method of mounting said gear (16 inner spline), said at least one oil pump 12 and said at least one vacuum pump 40 on said single motion transmission shaft (15, 31) coaxially to said main axis X-X (pump axis), wherein mounting said gear (16 inner spline), said at least one oil pump 12 and said at least one vacuum pump 40 on said single motion transmission shaft (15, 31) comprises positioning said gear (16 inner spline) between said at least one oil pump 12 and said at least one vacuum pump 40.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. Claims 1, 2, 4-6, 8 and 9-11 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over Whitefield US 5,282,446. Whitefield teaches a constructive single motion transmission shaft from two sub-shafts. As discussed below given the broadest reasonable interpretation of the

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limitations as claimed Whitefield meets the requirements for anticipation. In the alternative Whitefield makes the limitations obvious because a simple modification in which shafts 15 and 31 were formed as a monolithic component would be an obvious modification since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

Response to Arguments

11. Applicant's arguments filed June 24, 2010 have been fully considered but they are not persuasive. The applicant argues that Whitfield does not teach a single motion transmission shaft because the instant reference teaches two shafts that combine to form a transmission shaft. The two shafts 15 and 31 constructively form a single shaft that defines a single longitudinal axis about which both pumps 12 and 40 rotate. Further given the broadest reasonable interpretation a shaft that rotates two elements about the same longitudinal axis regardless of the is component parts transmits motion about a single axis and is constructively and single motion transmission shaft.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD J. WEINSTEIN whose telephone number is (571)272-9961. The examiner can normally be reached on Monday - Thursday 7:00 - 5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on (571) 272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Devon C Kramer/
Supervisory Patent Examiner, Art
Unit 3746

/Leonard J Weinstein/
Examiner, Art Unit 3746